# Project 2 – Implement Reliable Transport

- Bears – TP: A simple reliable transport protocol based on GBN
    - Receiver code is provided
    - Only implement sender

- Basic requirements (85%) , deal with:
    - Loss, corruption and reordering
    - Duplication and delay

- Performance requirements (15%):
    - Fast retransmit
    - Selective acknowledgement

Protocol

- Packet types:
  - Start, data, ack, end, and sack

- Sliding window size: 5 packets

- Receiver returns cumulative acknowledgement

start|0|<data>|<checksum>

data|1|<data>|<checksum>

ack|2|<checksum>

end|2|<data>|<checksum>

ack|3|<checksum>
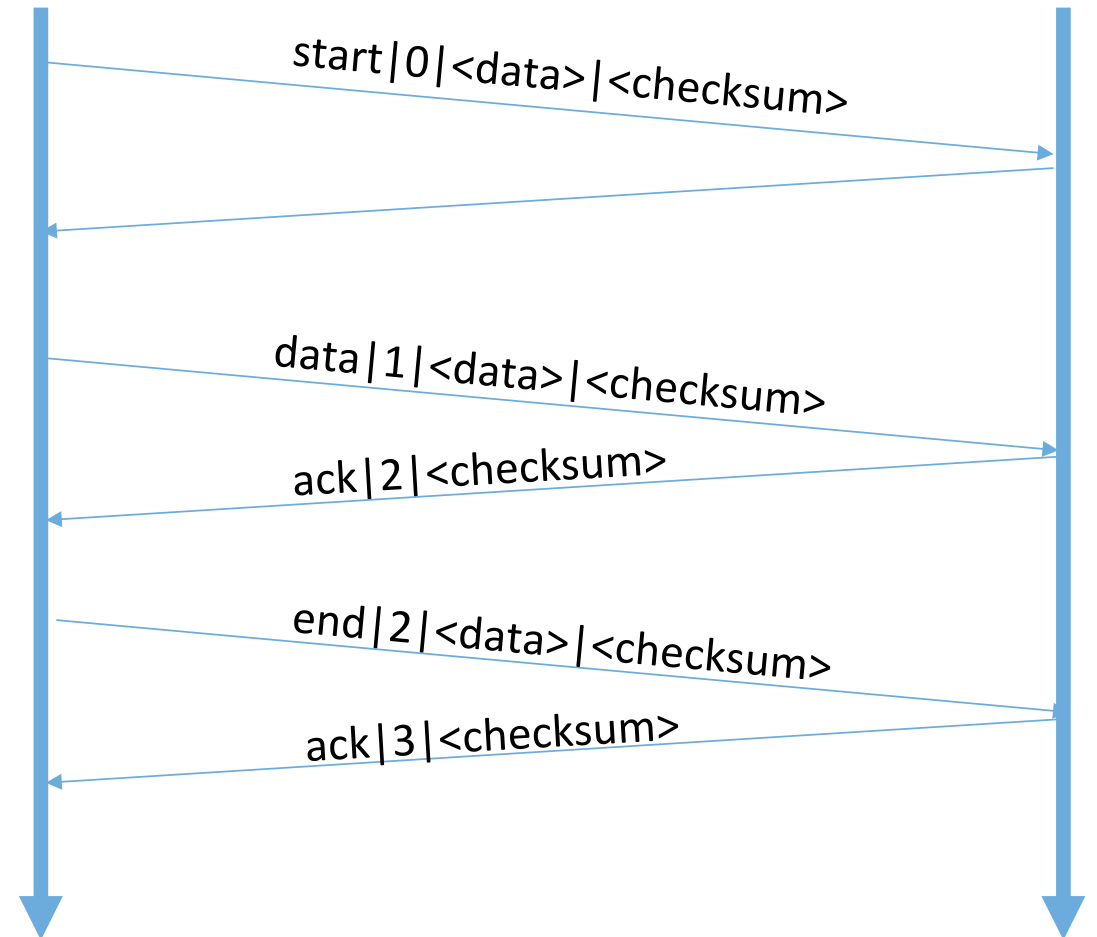
Sender

- The sender should be able to send a file to the receiver

  python Sender.py -f <input file>

- Implement a Go Back N based sender

- It should have a 500ms retransmission timeout

- It **must not** produce any console output

Test and Grading

We provide TestHarness.py for testing
- and a similar version of TestHarness.py is used for grading

Tips:
- Start your project early
- You may start with "Stop-and-Wait"
- Write your own test cases

Logistics

- GSIs: Peter, Radhika and Akshay

- Additional OH for help with the project – will be announced on Piazza

- These slides, Spec and code online midnight, today

- Due Nov 2, at noon.